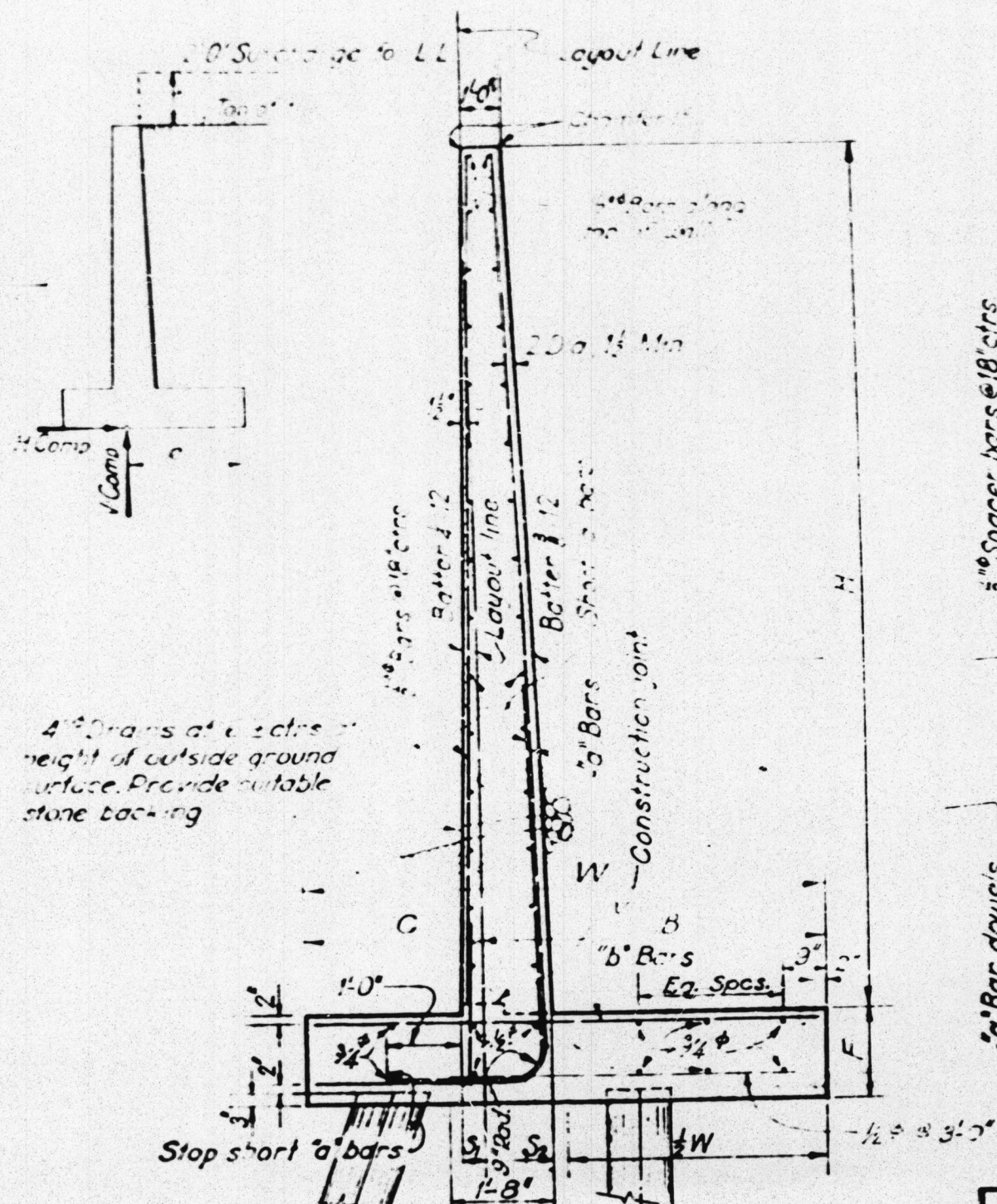
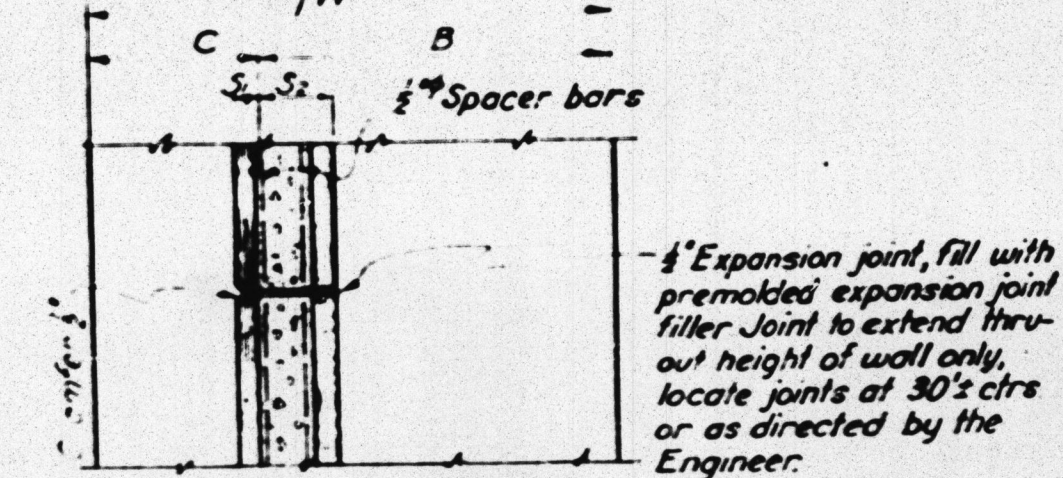
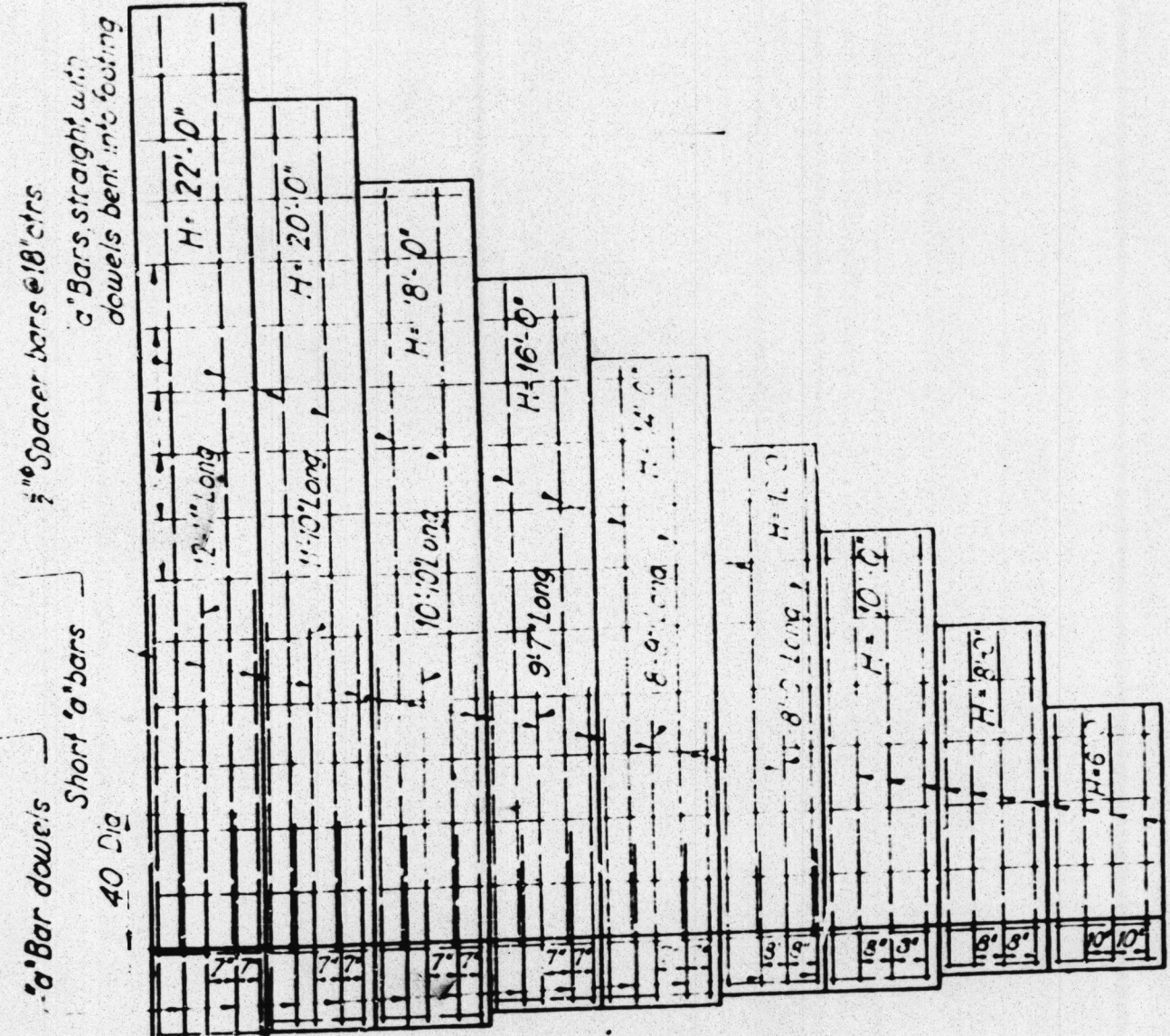




SECTION



PLAN OF EXPANSION JOINT

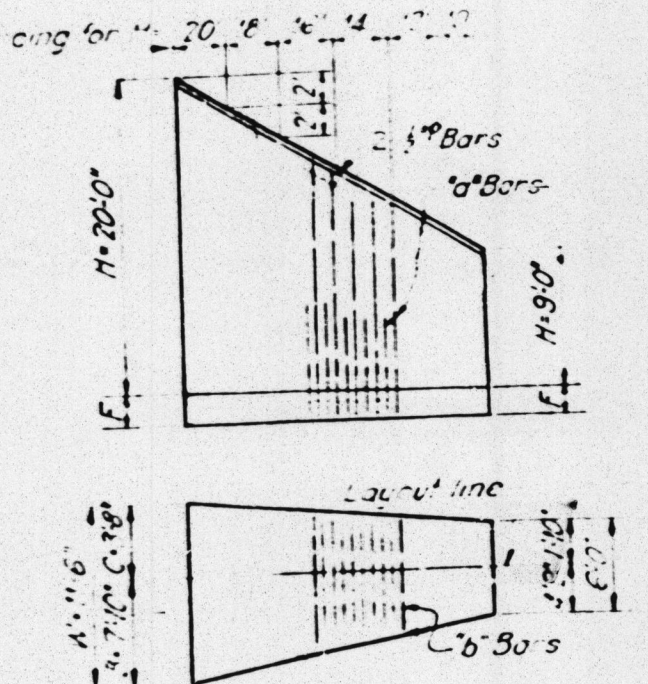


ELEVATION

	22'	20'	18'	16'	14'	12'	10'	8'	6'
H	22'	20'	18'	16'	14'	12'	10'	8'	6'
W	12'-6"	11'-6"	10'-6"	9'-6"	8'-6"	7'-6"	6'-6"	5'-6"	4'-6"
C	4'-0"	3'-8"	3'-4"	3'-0"	2'-8"	2'-4"	2'-0"	1'-8"	1'-4"
B	8'-6"	7'-10"	7'-2"	6'-6"	5'-10"	5'-2"	4'-6"	3'-10"	3'-2"
F	2'-0"	2'-0"	2'-0"	1'-6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
S ₁	5 1/4"	5"	4 1/4"	4"	3 1/2"	3"	2 1/2"	2"	1 1/2"
S ₂	1'-8 1/4"	1'-7 1/4"	1'-6 1/4"	1'-5 1/4"	1'-4 1/4"	1'-3 1/4"	1'-2 1/4"	1'-1 1/4"	1'-0 1/4"
a' Bars	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"
b' Bars	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"	4'-6 7/8"
Conc CF/ft	66.25	64.07	61.89	59.71	57.53	55.35	53.17	50.99	48.81
Steel Lbs/ft	354.70	269.71	205.79	147.66	107.97	69.31	50.87	33.58	25.20
Ice Pres	4,700	4,200	3,700	3,200	2,700	2,200	1,700	1,200	700
W Comp Lbs	12,100	10,300	8,640	6,890	5,530	4,250	3,210	2,175	1,440
V Comp Lbs	29,700	25,500	21,300	17,600	14,000	11,000	8,300	6,150	4,000
c	8.25'	7.55'	6.80'	6.15'	5.50'	4.85'	4.15'	3.50'	2.80'

Note: Key omitted from above quantities

See Sheet #3.



TYPICAL LAYOUT EXAMPLE

NOTES

All concrete to be Class "A" concrete
 All reinforcing steel to be of structural grade deformed bars, and where bars are spliced they shall lap at least 40 diameters
 When the footing rests on a rock foundation "W" may be decreased to 0.4 (H+3') making all the reduction in "B" leaving "C", "S₁" and "S₂" unchanged.
 Design data: $f_c = 1000 \text{ psi}$, $f_s = 18,000 \text{ psi}$, $u = 150 \text{ psi}$, $n = 10$, earth = 120 lbs/cu.ft and equivalent fluid = 36 lbs/sq.ft/ft. of height.
 Wall is designed for 2'-0" surcharge. For a greater surcharge a special design will be required.
 Vertical bars to be doweled only, when they extend more than 10' above top of footing.
 Except as noted above,
 $W = \frac{1}{2}(H+3')$, $C = \frac{1}{6}(H+2')$, $B = \frac{1}{3}(H+3')$.

BRIDGE ACROSS SANTA ANA RIVER	
CANTILEVER RETAINING WALL	
2' LEVEL SURCHARGE	
SCALE: NONE	FILE NO
BRIDGE NO. 55-96	DRAWING NO. 3718-44

MICROFILMED

JUL 13 1968

Bridge 55-10
 3.9 mi. e/o Anaheim
 Sheet 4 of 8
 Scale: As Shown
 Blue-line Print